International Consortium in Advanced Biology (CIBA):

An Embrapa / Agropolis International initiative

Dr. Sylvie Lewicki - Dhainaut
Cirad, UMR AGAP

cirad — AGROPOLIS INTERNATIONAL — Embrapa — Ministério da Agricultura, Pecuária e Abastecimento — BRASIL UM PAÍS DE TODOS GOVERNO FEDERAL

AGROPOLIS INTERNATIONAL
Montpellier – Languedoc-Roussillon – France

THE SCIENTIFIC COMMUNITY

A **worldwide leading scientific community** in the field of agriculture, food, biodiversity and environment

- Research
- Education and training
- Scientific and technical information resources
- Technology transfert and innovation

CGIAR
Science for a food secure future

Headline

HEADLINE

DANIEL HORACIO REARTE, HAS TAKEN HIS FUNCTIONS AS THE FIRST COORDINATOR OF THE LABINTEX/EXTERNAL LABORATORY OF INTA WHICH HAS BEEN SET UP ALONG THE LINES OF THE BRAZILIAN EMBRAPA-LABORATORY AT AGROPOLIS INTERNATIONAL

INTA Instituto Nacional de Tecnología Agropecuaria

▼ News

Subscribe to the news RSS feed

The 2nd "Global Conference on Agricultural Research for Development" (GCARD) will take place on 29th October-1st November in Punta del Este (Uruguay).

COLLECTIVE ACTIONS

An association **gathering its members** since 1986

- Promoting expertise and knowledge at international level
- Go-between and support to scientific activities
- Project management
- Innovation and international

- About us
- Members and partners

Financial support from

At the heart of the scientific community of Montpellier and the "*Région Languedoc-Roussillon*", a large range of expertise in the area of agriculture, food, environment and biodiversity

2300 research scientists and teachers

500 people on long-term assignments in 60 partner countries

80 research units

- **Biodiversity and Land ecosystems**
- **Biodiversity and Aquatic ecosystems**
- **Host-vector-parasite interactions and infectious diseases**
- **Genetic resources and integrative plant biology**
- **Agronomy, cultivated plants and cropping systems**
- **Grapevine and Wine, regional specific supply chain**
- **Animal production and health**
- **Food : nutritional and health concerns**
- **Economics, societies and sustainable development**
- **Modelling, spatial information, biostatistics**
- **Water: resources and management**
- **Environmental technologies**

Once upon a time ...

Before February 2002: Some collaborative projects Embrapa / Agropolis International in advanced biology;

February 2002: Installing Labex-Europa in Agropolis International;

March 2003: Development of an Embrapa - CIRAD strategic plan in advanced biology

Novmber 2005: First discussions between Embrapa - Labex and CIRAD;

March 2006: Visit of Maurício Lopes in Montpellier and a *Concept note* is written;

August 2006: Discussion with Embrapa researchers Cenargen and Jean-Christophe Glaszmann during a visit to Brasília;

Genetic Improvement and Adaptation of Mediterranean and Tropical Plants

The Unit

The AGAP very large research unit, which was launched on 1st January 2011, is a joint research unit placed under the authority of three research and higher education establishments, focusing on the genetic improvement of tropical and Mediterranean plants: CIRAD, INRA and Montpellier SupAgro. Staff from the *Institut national de recherche en informatique et en automatique* (INRIA), the *Institut français de la vigne et du vin* (IFV) and the *Conservatoire botanique national méditerranéen de Porquerolles* (CBN) also work within AGAP.

The unit's scientific project

The unit endeavours to create the most suitable planting material for farming systems involving the main 20 tropical and Mediterranean species.

Read more

Staff in France but also worldwide

Document

Organization Agap

Contact

Director

Jean-Christophe Glaszmann
Courriel

Assistant directors

Robert Domaingue
Emmanuel Guiderdoni
Sylvie Lewicki_Dhainaut
Patrice This
Courriel

Context

State of Art: **26 research projects of scientific collaboration between Embrapa and Agropolis institutions (Cirad, IRD…)**

Objectives: **strengthen and increase the scientific partnerships between Embrapa and Agropolis institutions to enhance the portfolio of CIBA's projects**

- **2006:** discussions initiated in the frame of the Embrapa Labex / Cirad (J.C. Glaszmann and M. Lopes)
- **2007:** "Cirad / Embrapa Concept note"

- **2007:** Agropolis Fondation supports CIBA meetings (4 organized between 2007 and 2009)

agropolis fondation
Pour la Recherche Agronomique et le Développement Durable

III CIBA Workshop (Brasília) – March 24-28, 2008

61 participants

WG I: Oil palm

WG VI: Citrus *greening*

WG II: Cacao and cupuaçu

WG V: Apple tree

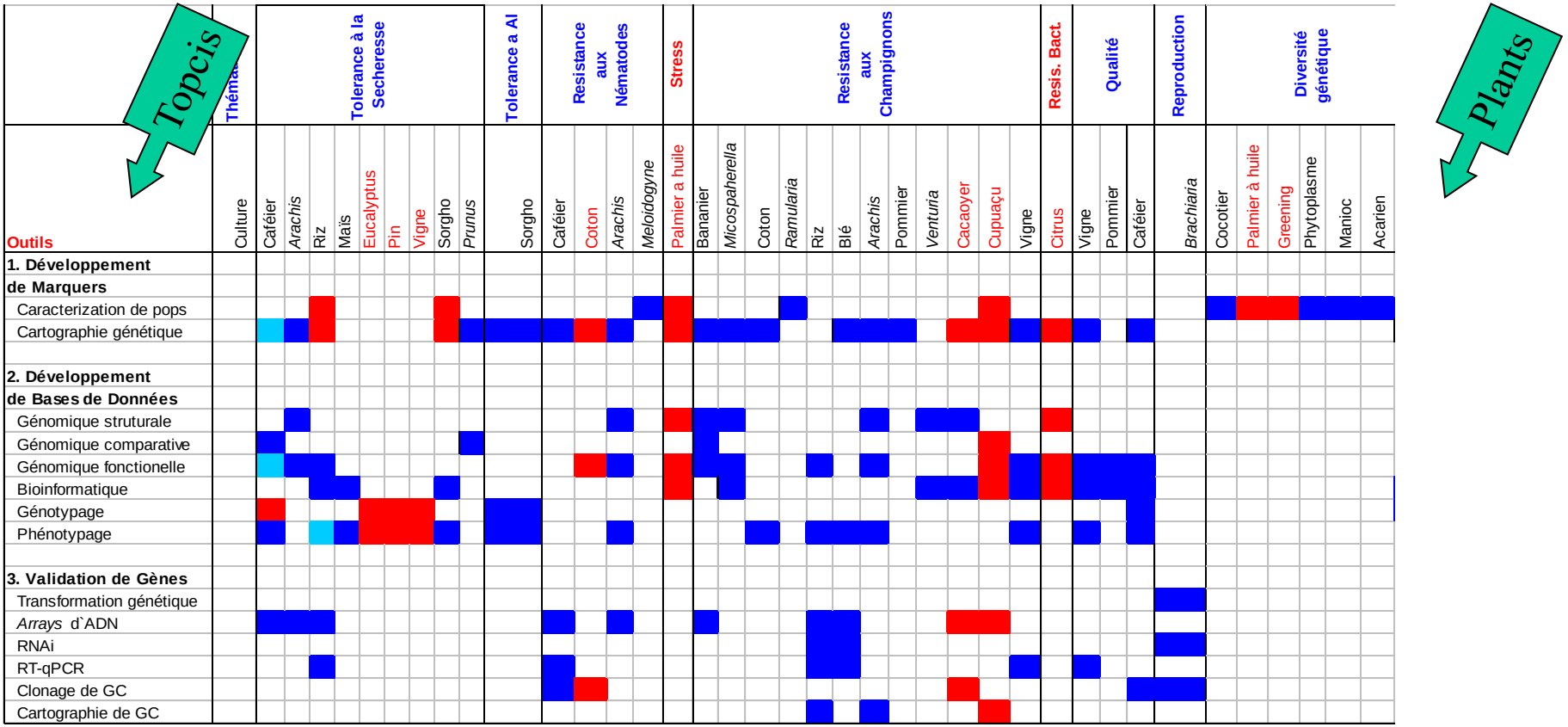
WG III: Abiotic stress

WG IV: Biotic stress

Participants of the 4th CIBA Workshop CIBA (10/2009)
68 participants: 43 french, 18 brazilian and 7 africans
+ CNPq + CAPES + brazilian Universities...

Context

26 research projects of scientific collaboration between Embrapa and Agropolis partners (June 07) + 25 additional collaborative actions after three CIBA Workshops (June 09)



Version 12 2010

Bilan des 26 projets de collaboration

1 Embrapa Meio Norte

1 Embrapa Algodãao

1 Embrapa Acre

1 UFR (Porto Velho)

1 Embrapa Tabuleiros Costeiros

2 Embrapa Cerrados

1 Embrapa Mandioca e Fruticultura

18 Embrapa Recursos Genéticos e Biotecnologia

2 INCAPER

1 UFLA (Lavras)

2 UFV (Viçosa)

3 Embrapa Café

2 Embrapa Milho e Sorgo

4 UCB (Brasília)

1 UFG (Goiânia)

3 Embrapa Arroz e Feijão

1 Unicamp (Campinas)

1 ESALQ (Piracicaba)

1 UNESP (Botucatu)

1 CENA/USP (Piracicaba)

4 IAC

5 IAPAR

1 UEL (Londrina)

2 Embrapa Uva e Vinho

2 Embrapa Trigo

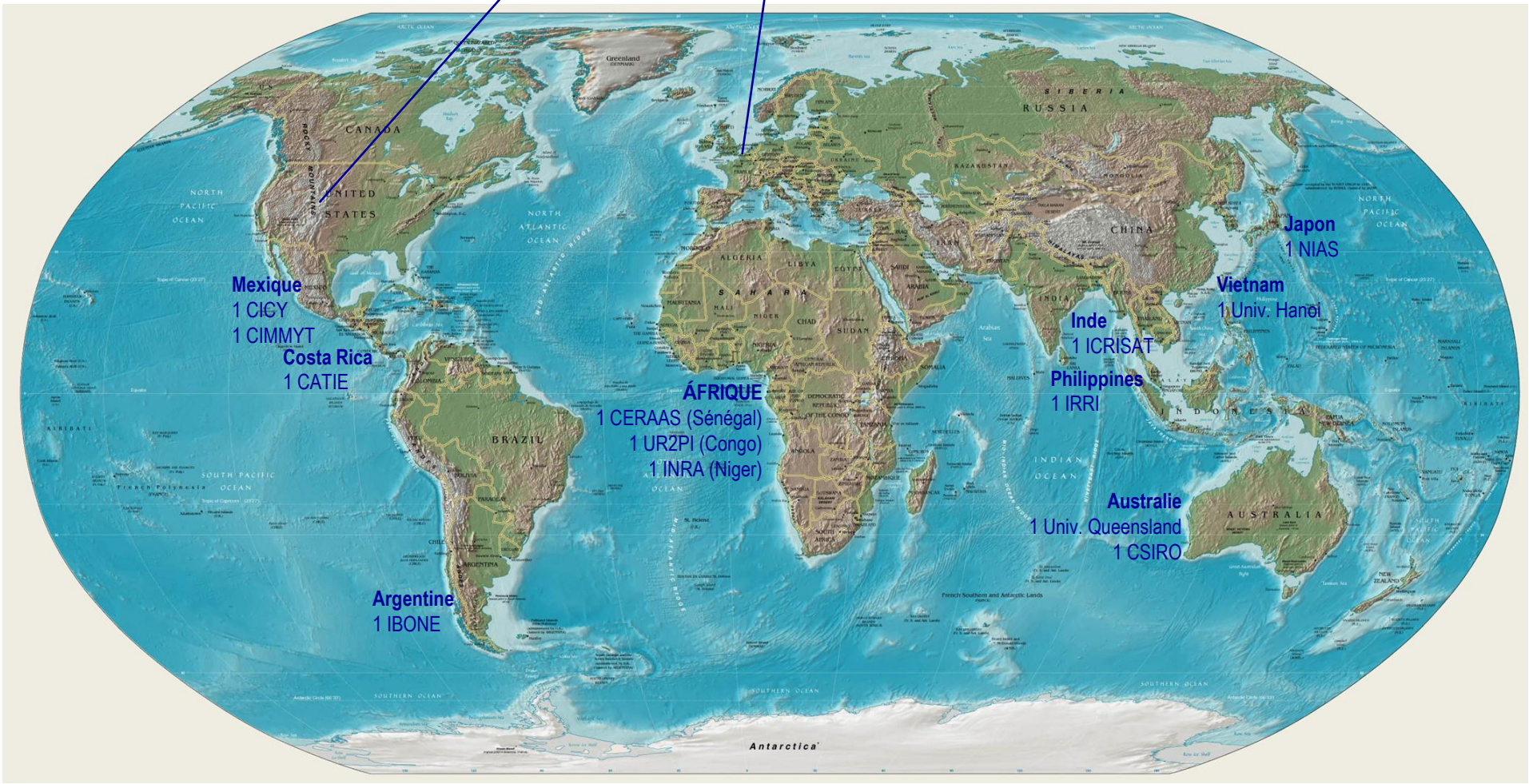
13 Unités de l`Embrapa
09 Universités brésiliennes
03 Instituts régionaux de recherche

Bilan des 26 projets de collaboration

Bilan des 26 projets de collaboration

EUA
2 USDA-ARS
2 Univ. Cornell
1 Univ. Purdue
1 UC Davis

EUROPE
2 Univ. Wageningen (Hollande)
1 Univ. Utrech (Hollande)
1 John Innes Inst. (Angleterre)
1 Univ. Aarhus (Danemark)



cirad — AGROPOLIS INTERNATIONAL — Embrapa — Ministério da Agricultura, Pecuária e Abastecimento — BRASIL UM PAÍS DE TODOS GOVERNO FEDERAL

- Agreements signed between Embrapa (in the name of Brazilian SNRA) and Agropolis (in the name of french partners)
- 2007: letter of intention (S. Crestana-Embrapa / G. Matheron-Cirad)
- 2008: final signature (S. Crestana-Embrapa / H. Carsalade-Agropolis)

Embrapa e CIRAD instalam consórcio de US$ 4,6 milhões

Fernando Bizerra/BG Press

O diretor-presidente da Empresa Brasileira de Pesquisa Agropecuária (Embrapa), Silvio Crestana, e o diretor-geral do Centro Francês de Cooperação Internacional em Pesquisa Agropecuária para o Desenvolvimento (CIRAD), Gérard Matheron, instalaram na tarde desta quarta-feira (26 de setembro), em Brasília, o Consórcio Internacional de Biologia Avançada (CIBA), que movimentará US$ 4,6 milhões em 26 estudos direcionados principalmente aos temas meio ambiente e mudanças climáticas.

Embrapa Cód.
10200.08/0119-7

Agreement to form an International Consortium on Advanced Biology for Plant Breeding and Development (CIBA).

Between

EMBRAPA, as the coordinator of the National Agricultural Research System (SNPA), in Brazil;

and

Agropolis International, as the association of the French research and training institutions located in Montpellier and in the Languedoc-Roussillon Region;

Background

Considering the Agreement of Scientific and Technological Cooperation signed in 16/01/1967 and the Framework Agreement of Cooperation, signed in 28/05/1996, between The Federal Republic of Brazil and the Government of the French Republic;

Considering the Contract of Technical Cooperation between the Brazilian Agricultural Research Corporation (Embrapa), and Agropolis International to implement the Embrapa Labex-Europe project; signed in 13/02/2006,

Article 1 – Object

1.1 The signatory organizations of this agreement, from here-on identified as the "Partners", have defined the rules and mechanisms to create and operate the International Consortium on Advanced Biology for Plant Breeding and Development of tropical, sub-tropical and Mediterranean species, from here-on identified as CIBA.

Article 2 – Legal status and location

2.1 CIBA has no legal status distinct from the existing legal status of the Partners. Its operations will be guided by this agreement.

2.2 CIBA will have headquarters both at Embrapa Headquarters, Department of Research and Development (Embrapa Sede / DPD – 2o. andar, PqEB - Parque Estacao Biológica, 70770-901 Brasilia D.F., Brazil) and at Agropolis International (Agropolis International, Av. Agropolis, 34394 Montpellier Cedex 5, France).

Article 3 – Objectives, outputs, thematic areas and geographic areas of implementation

3.1 The general objective of CIBA is to develop and sustain an efficient strategy for international cooperation in research and capacity strengthening in the field of advanced biology applied to breeding of tropical, sub-tropical and Mediterranean plants. Putting together the resources, capacities, knowledge and know-how needed to study and harness the diversity of plant genetic resource and to identify essential genes and agronomic traits for application in breeding programs aiming at generating significant positive impacts in agriculture and livelihoods and to promote the sustainable development in Tropical, Sub-Tropical and Mediterranean areas, the

Objectives

- to develop and sustain an efficient strategy for international cooperation in research and capacity building in the field of advanced biology applied to breeding of Tropical, Sub-Tropical and Mediterranean plants,
- to generate significant positive impacts in agriculture
- to promote the sustainable development in Tropical, Sub-Tropical and Mediterranean areas, putting together the resources, capacities, knowledge and know-how needed to study and harness the diversity of plant genetic resources,
- to identify essential genes and agronomic traits for application in breeding programs.

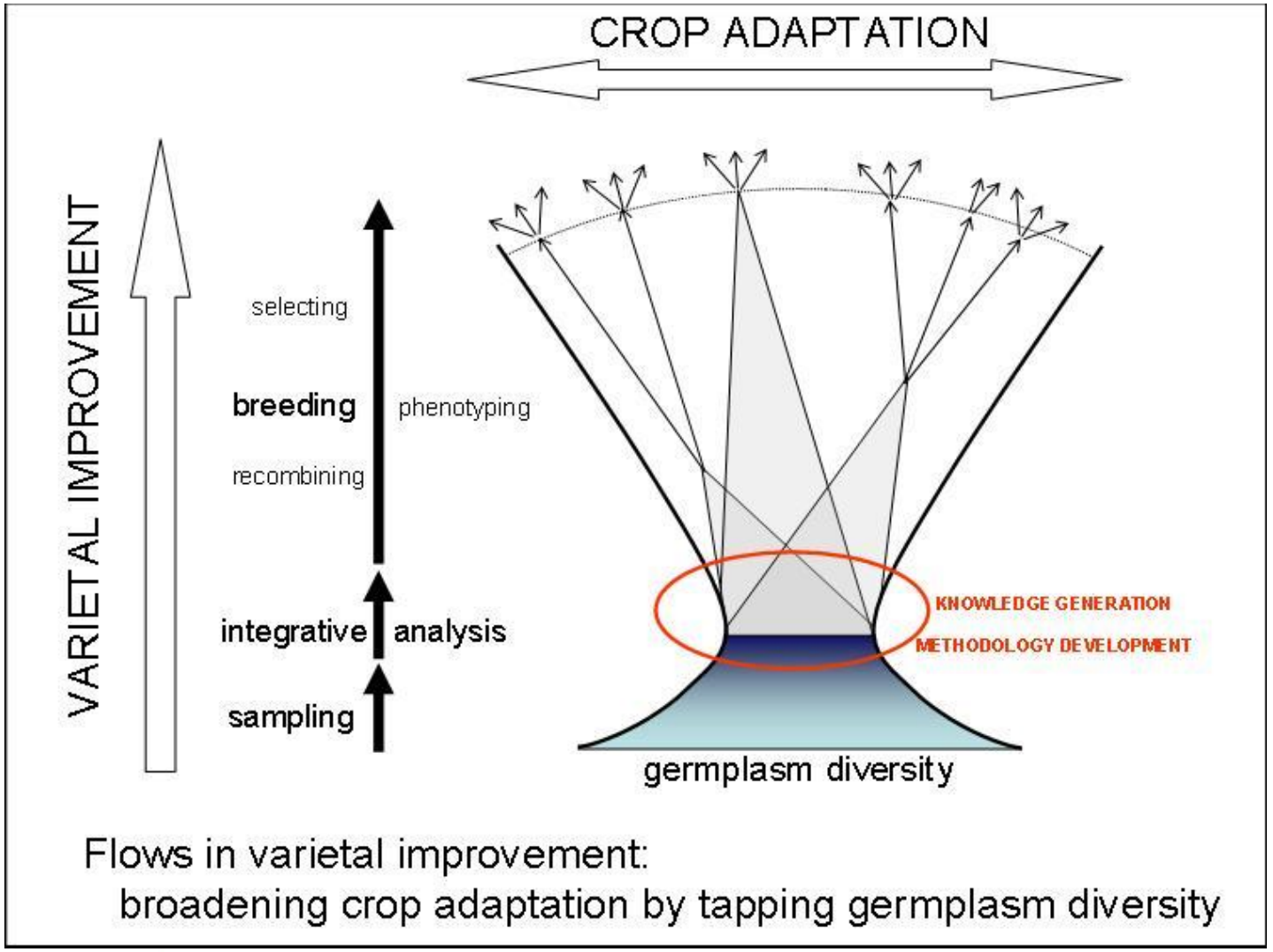
CIBA keywords:

- International scientific collaborations
- Share capacities, funds, knowledges and expertise
- Plant genetic resources and diversity
- Essential genes and characteristics
- Programs of genetic breeding in tropical and Mediterranean agricultures

CIBA benefits:

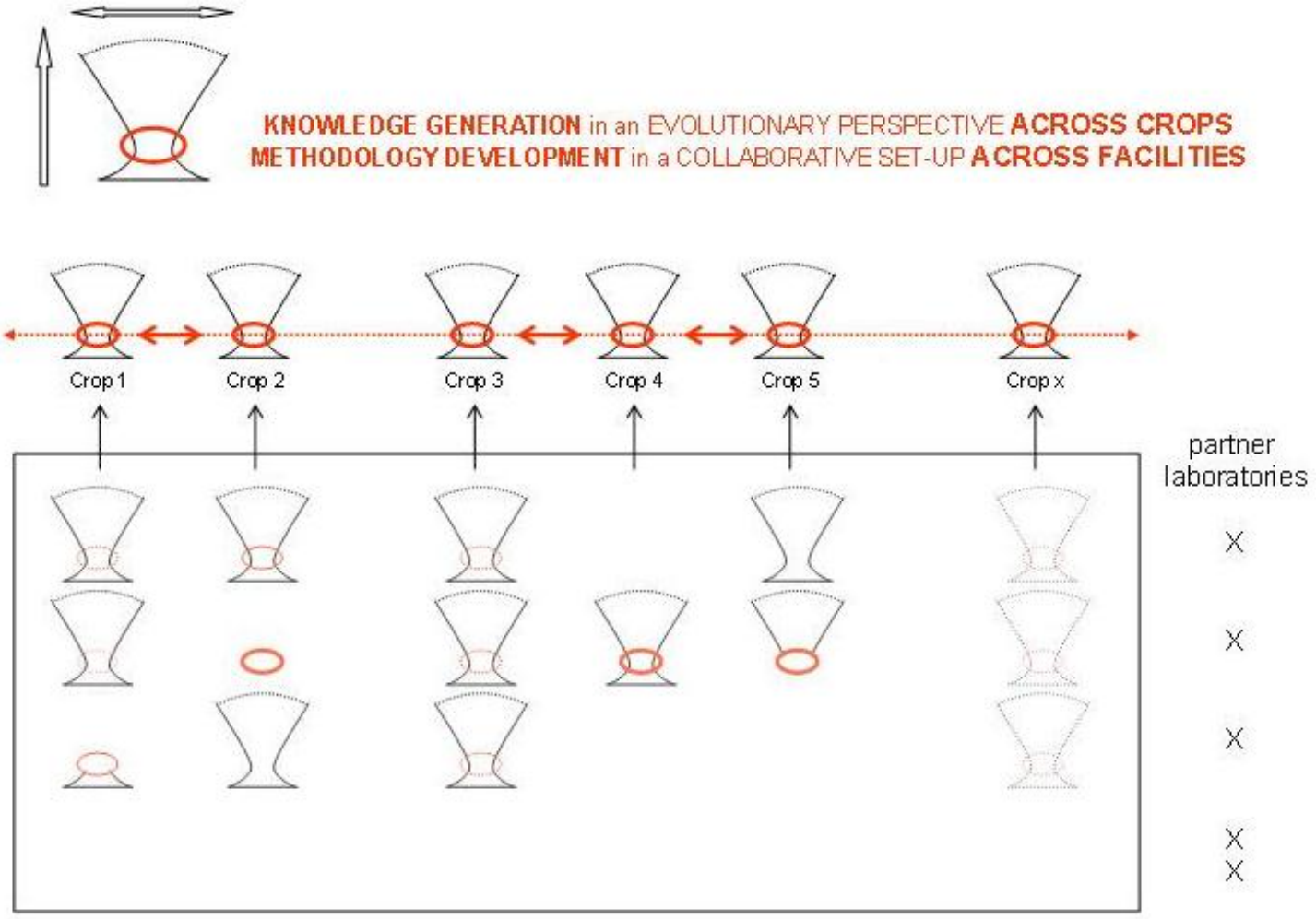
- **Share common objectives**, infrastructure and capacities
- Critical mass to generate knowlegdes and technical innovations
- International visibility
- Essential genes and characteristics
- Case of study (Success story") for other strategical aereas and to develop collaboration with new countries

What do we need to create new cultivars?



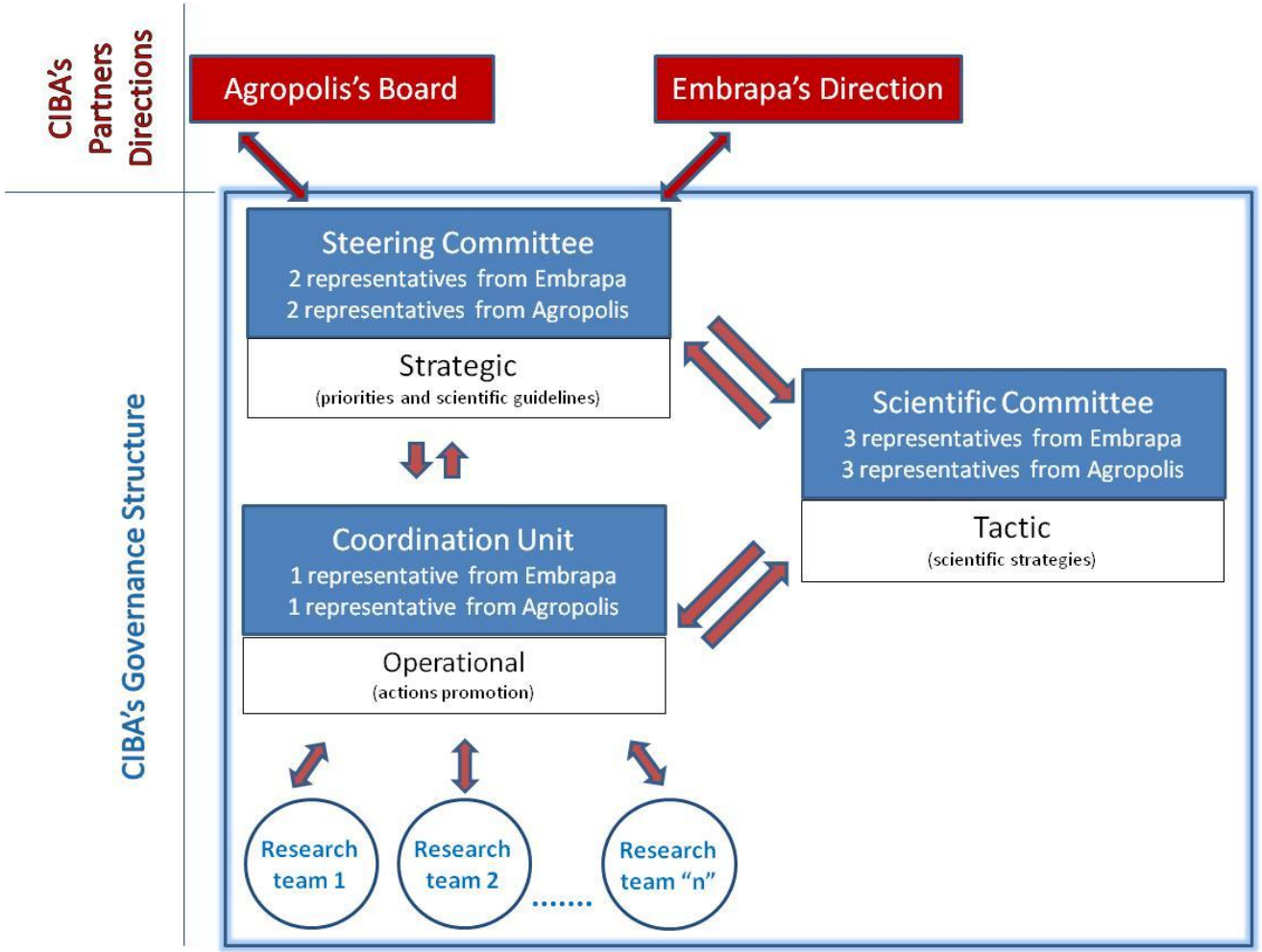
Flows in varietal improvement:
broadening crop adaptation by tapping germplasm diversity

Working in networks



A rationale for coordination between efforts in modern varietal improvement

CIBA management



Mauro Carneiro (in discussion)

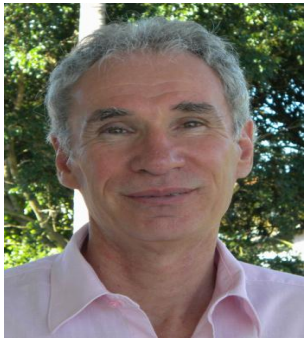
Pedro Arcuri
(Coordenador Embrapa Labex-Europa)

Steering Committee

2 representatives from Embrapa
2 representatives from Agropolis

Bernard HUBERT,
(Agropolis President)

Bernard Mallet
(Director Cirad/INRA in Brasil)



?

Mauro Carneiro
(Embrapa Cenargen)

?

(in discussion)

- Mauricio Lopez (DPD)
- Luciano Nass (SRI)

?

(in discussion)

- Fatima Grossi de As (Cenargen)

Scientific Committee

3 representatives from Embrapa
3 representatives from Agropolis

Jean –Christophe Glaszmann
(Director UMR AGAP Cirad)

Philippe Guerche
(Director INRA)

Jean Louis Pham
(IRD Agropolis Fondation)

Ana Cristina Miranda Brasileiro
(Embrapa Cenargen)

Sylvie Lewicki- Dhainaut
(Cirad, UMR AGAP)

Coordination Unit

1 representative from Embrapa
1 representative from Agropolis

Diana Fernandez
(IRD UMR RPB)

Pierre Marraccini
(Cirad UMR AGAP)
(Animator & Coordinator Cirad)

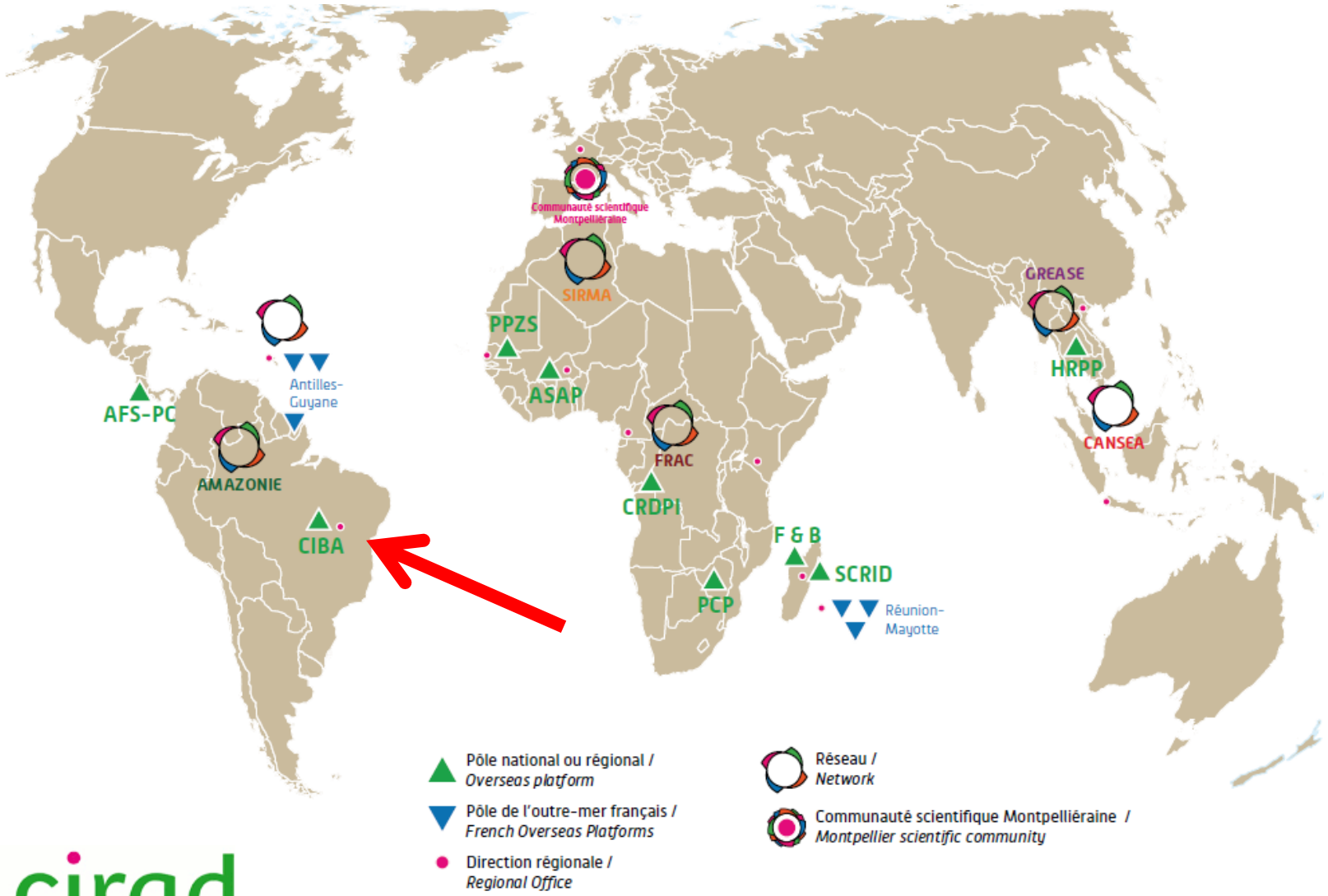
CAPES/Agropolis fondation launched Joint call for proposals since 2010

AGROPOLIS FONDATION – CAPES 2010 JOINT CALL FOR PROPOSALS

LIST OF SELECTED PROJECTS

Proj ID	Short name	Project's Full name	Proponents	AF Funding Awarded (€)	CAPES Funding (€)	
1002-003	Nema-tode effectors in rice-Meloi-dogyne inter-actions	Identification of nematode (Meloidogyne spp.) effectors of pathogenicity in rice (Oryza sativa)	-Diana Fernandez (France) -Maria Fatima Grossi de Sa (Brazil) -Hughes Baimey (Benin)	20 000	To be communicated by CAPES to Brazilian team	rice ➢ CIBA
1002-006	PAIRS: Phosphorus Assess-ment by InfraRed Spectro-metry	InfraRed Spectrometry as a tool to model inorganic and organic phosphorus availability in tropical soils under conservation systems	-Thierry Becquer (France) -Maria de Fatima Guimarães (Brazil) -Tantely Razafim Belo (Madagascar)	19 760	To be communicated by CAPES to Brazilian team	
1002-008		Organization of a joint French-Brazilian-African training course for the construction of a sentinel network for Greening disease outbreak detection in peri-Mediterranean countries.	-Frédéric Gatineau(France) -Alexandre Morais do Amaral (Brazil) -Joseph Tamesse Lebel (Cameroun)	18 980	To be communicated by CAPES to Brazilian team	
1002-009	Coffea retro-transposons	Role of active retrotransposons (RT) In Coffea canephora and C. arabica Genome Evolution	-Alexandre de Kochko (France) -Claudia Carareto (Brazil) -Pascal Musoli (Uganda)	20 000	To be communicated by CAPES to Brazilian team	coffee ➢ CIBA
1002-012	PHE-GECO	PHEnotyping, GEnotyping and analyzing genetic diversity and structure of a collection of Coffea arabica from Ethiopia, in relation with quality and drought tolerance	-Thierry Leroy (France) - Luiz Filipe (Brazil)	20 000	To be communicated by CAPES to Brazilian team	coffee ➢ CIBA

The CIBA:
One of the Cirad's Platforms in Partnership for research and training



cirad

CIBA : scientific animation 2010
(supported by Cirad and partners):

CIBA : scientific animation in 2011 (supported by Cirad and partners):

- ***Meeting « Functional-Structural Plant Models"***

  (Cirad-Embrapa CNPTIA)
- ***Preparation* Project *ANR Amazonie***

  (Cirad-Embrapa CPAFAC)
- ***Meeting « Resistance to fungus –Theobroma »***

  (Cirad-UESC-CEPLAC-Embrapa CEPATU)
- ***Meeting « Drought stress – Citrus »***

  (Cirad-Embrapa CNPMF)
- ***Research School in Bioinformatics 2011***

  (Cirad-Embrapa CNPTIA-IRD)

Ciba

The International Consortium in Advanced Biology (CIBA)

presents

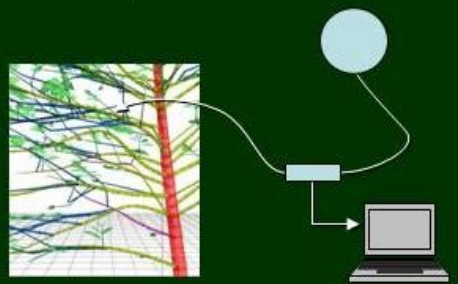
First French-Brazilian Meeting on

Functional-Structural Plant Modeling

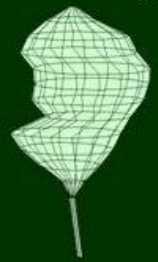
Embrapa – Informática Agropecuária

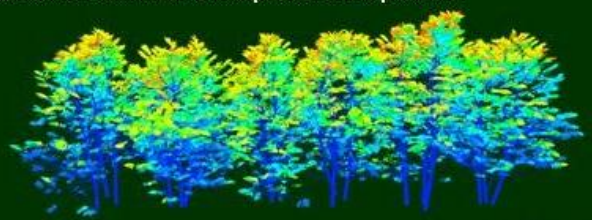
Campinas 24-27 October 2011

- ✓ Plant architecture
- ✓ Measurement and analysis
- ✓ Plants and environment
- ✓ Plant growth modeling
- ✓ Tools and platforms



This meeting aims to give an overview of the Functional-Structural plant modeling approach for a mixed community of agronomists, plant physiologists, modelers and computer scientists with various illustrations on annual and perennial plants.





www.cnptia.embrapa.br

sites.google.com/site/fspm1meeting/

Supported by:

cirad

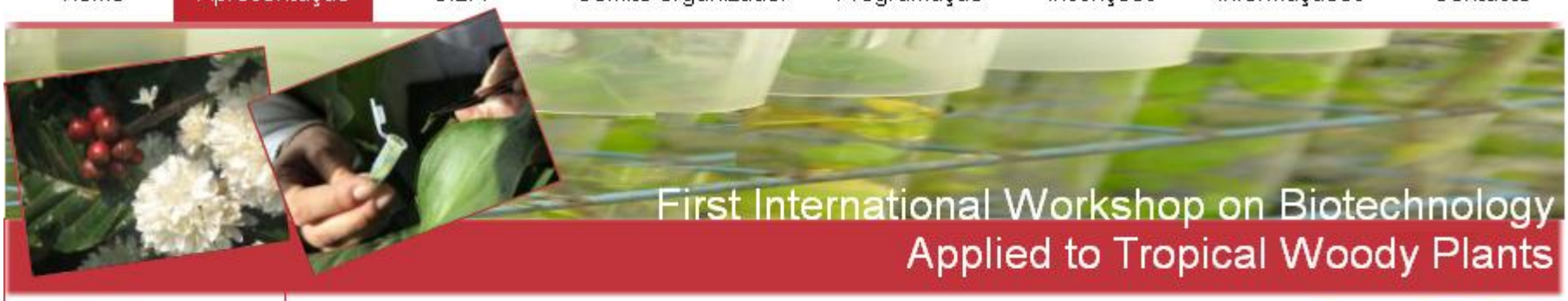
Embrapa

Ministério da Agricultura, Pecuária e Abastecimento

GOVERNO FEDERAL BRASIL PAÍS RICO É PAÍS SEM POBREZA

Ciba

Home | Apresentação | CIBA | Comité organizador | Programação | Inscrições | Informaçãoes | Contacto



Instituições organizadoras

cirad
LA RECHERCHE AGRONOMIQUE POUR LE DÉVELOPPEMENT

UFLA
UNIVERSIDADE FEDERAL DE LAVRAS

Patrocinadores

CAIXA SEGUROS

MARS CACAU
Centro Mars de Ciência do Cacau

APRESENTAÇÃO DO WORKSHOP

O evento será desenvolvido na forma de workshop permitindo uma discussão profunda através da apresentação de palestras e espaço para troca de idéias e experiências entre os pesquisadores.
Ao longo de quatro dias, 20 pesquisadores brasileiros e franceses apresentarão o que tem sido realizado no âmbito científico sob o aspecto da genômica, transformação genética e micropropagação em importantes lenhosas tropicais (como café, citros, cacao, eucalipto, seringueira por exemplo), sendo incentivado a transferência de tecnologia, a possibilidade de intercâmbio e a realização de novos projetos de pesquisa entre as instituições envolvidas.
Este workshop será destinado à estudantes de graduação, pós-graduação e professores de diferentes Universidades brasileiras e também para pesquisadores e profissionais que trabalham com espécies tropicais lenhosas.

cirad | AGROPOLIS INTERNATIONAL | Embrapa | Ministério da Agricultura, Pecuária e Abastecimento | BRASIL UM PAÍS DE TODOS GOVERNO FEDERAL

Muito obrigado pela atenção !
Merci de votre attention !
Thank you for your attention

Brazil

France